kocytosis had been induced usually lived a few days longer than the control untreated tuberculous guinea-pigs. The chief difference in pathological features at autopsy was that the spleen of the treated animals was quite small, bound down by adhesions, and was free from definite tubercles, while in the untreated tuberculous animals the spleen was enlarged and showed necrotic areas.

## HYGIENE AND PUBLIC HEALTH

UNDER THE CHARGE OF

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Experiments on Alastrim.—Leake and Force (Public Health Rep., 1921, xxxvi, 1437), working with material in the shape of crusts and vesicle contents from cases of alastrim, a mild form of smallpox or a smallpox-like disease, found that the virus immunized monkeys against vaccine virus. Rabbits gave similar results, while rabbits previously inoculated with vaccine virus showed cutaneous sensitization to smallpox, alastrim and vaccine virus, but were negative to chickenpox. The authors hold that this work indicates the identity of alastrim and smallpox.

A Guide to the Proper Rat-proofing of Buildings.—Hauer (Public Health Reports, 1921, xxxvi, 930) points out that trapping and poisoning result in only temporary reduction of the number of rodents in a community, though these measures are valuable in a plague emergency. On the other hand, rat-proofing gives lasting results, though the warning is given that we cannot expect to make any community rodent-free. The classification of buildings according to rat hazard and subclassification with reference to construction and uses are given, as are the measures applicable to each group. Details of the proper use of concrete and of other important features of rat-proofing are given.

Industrial Dermatosis Among Printers.—McConnell (Public Health Reports, 1921, xxxvi, 979) investigated an eruptive condition known as "ink poisoning" among printers. The condition was found only among those who have "dry" skins and was not accompanied by any constitutional symptoms. The lesions varied from crythema to ulcers and were confined to the regions exposed to the ink. A calamine gelatine paint was found to remedy the dermatitis promptly. As a prophylactic it is recommended that lanolin or a mixture of lanolin and olive oil be rubbed into the hands and forearms.

Anopheles and Sea-water. - Griffits (Public Health Reports, 1921, xxxvi, 990) reviews carlier observations on the subject and records his own experiences. The latter lead to the following conclusions: (1) A. crucians was found to propagate in sea-water diluted to a maximum salinity of 10,088, or slightly more than 50 per cent average sea-water. The transfer to sea-water of A. crucians larvæ which had started their development in brackish water did not unfavorably affect their subsequent development. (2) A. quadrimaculatus was not found to breed in numbers sufficient to be of sanitary importance in a higher salinity than 10,003, or 1.5 per cent sea-water. In one case two larvæ found in water with a salinity of 10.048 developed into A. quadrimaculatus imagoes; but this observation requires confirmation as to whether this species may complete its entire water cycle in so high a percentage of sen-water. The question is raised as to whether A. quadrimaculatus larvæ may not withstand a much higher salinity intermittently than continuously. Specimens of A. quadrimaculatus transferred from fresh pond-water to sea-water, salinity 10,160, were all killed within twelve hours. (3) A. punctipennis was not found developing in salt or brackish waters. This species breeds under a wider range of conditions than either A. quadrimaculatus or A. crucians, but apparently does not survive in salt or brackish waters. Larvæ of A. punctipennis all died within seven hours when put into sea-water.

Typhoid Fever in Cleveland, Ohio, for the Years 1918, 1919 and 1920. -Perkins (Public Health Reports, 1921, xxxvi, 1095) gives a detailed discussion of recent experiences in Cleveland with typhoid fever, considering especially the possible sources of infections. The evidence excludes flies and milk as sources of any appreciable amount of infection; food, contact, and infection acquired by bathing in contaminated water are allocated a fairly definitely though relatively small number of cases. The city water supply, though part is filtered and all is chlorinated, is regarded as the chief source of infection. The author does not regard the chlorination as adequate to make the water supply safe, a point on which the water department of the city disagrees. A plea is made for the providing of a supply which shall at all times conform to Federal requirements from a bacteriological point of view, i. c., not to exceed one colon bacillus in 50 cc. It is noted that whenever an improvement has been made in Cleveland's water supply a drop in typhoid incidence has followed.

Recovery from Rabies, with Reports of Cases of Treatment Paralysis and of Recovery of Animals Apparently Rabid.—Phillips, Berry and Snock (Jour. Infect. Dis., 1921, xxix, 97) state that spontaneous recovery from rabies naturally acquired, while rare, does occur. The saliva of an animal which recovers from rabies may have been extremely virulent during the course of the disease. As early as thirty-eight days after recovery from street rabies in a dog, the infectivity of the brain may disappear and Negri bodies be absent. And that therapeutic measures to control the symptoms in developed rabies in man should not be so heroic as to themselves endanger the life of the patient, for there is a possibility of recovery.